Illinois

HAER No. IL-24

ILL 50 DTWA.1,

## **PHOTOGRAPHS**

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Historic American Engineering Record National Park Service Department of the Interior Washington, D.C. 20013-7127

## HISTORIC AMERICAN ENGINEERING RECORD

HAER ILL 50-OTWA.V,

MILL 'C' COMPLEX (Ottawa Silica Company)

HAER No. II.-24

Location:

South of Dee Bennett Road, west of Ottawa near the Illinois River Ottawa, LaSalle County, Illinois

UTM: 16 E.341440 N.4576780

Quad: Starved Rock

Date of Construction:

1917; Expanded 1927, 1929

Builder:

Unknown for 1917 building; Allen and Garcia, engineers, built the 1927 Sand

Draining-and-Drying Building

Present Owner:

Ottawa Silica Company

Present Status:

Abandoned

Significance:

An unique example of industrial architecture, the Sand-Sorting Building and the draining and drying building of

and the draining and drying building of Mill Complex "C" are part of the

nationally important glass-making

industry of Ottawa.

Project Information:

The Illinois and Michigan Canal was designated a National Heritage Corridor in 1984. The following year HABS/HAER embarked on an extensive inventory and documentation project of the 100-mile length of the corridor. Field work for

this project was concluded in 1987.

Final editing and photographic documentation was completed in 1992.

Compiler:

Gray Fitzsimons and Charles Scott

Mill "C" Complex HAER No. IL-24 (Page 2)

## History:

In 1894 the United States Silica Sand Company established the first large-scale silica sand pits near Ottawa on the south side of the Illinois River where the Saint Peter's sandstone anticline rises to the surface. The silica sand was obtained by blasting and hydraulic mining. In its early years the company shipped just one rail car of sand each day, but by 1912 U.S. Silica was shipping about 100 cars daily, or 3,300 tons of sand. U.S. Silica's most important customers were the glass manufacturers of Indiana. In 1917 U.S. Silica expanded its operation by constructing a new silica sand plant on the north side of the river. This plant, later called Mill "C", included a concrete-and steel Washing-Draining-and-Drying Building and a concrete-and-steel Sand-Sorting Building. Although U.S. Silica constructed a new sand Draining-and-Drying Building in 1927, the company continued to wash sand in the older Washing-Draining-and-Drying Building which stood next to the new structure.

The Ottawa Silica Company, established in 1900 by Edmund B. Thornton, was the chief competitor of U.S. Silica, and in 1928 Ottawa Silica acquired U.S. Silica. The U.S. Silica plant was renamed Mill "C". One year after taking it over, Ottawa Silica rebuilt the 1917 Sand-Sorting Building, adding three stories and a distinctive pyramidal roof. Shortly after expanding the plant, Ottawa Silica ceased operating Mill "C" because of the declining market of the 1930s. The complex has been abandoned ever since. At this time, Ottawa Silica Company plans to demolish Mill "C" in order to mine the rich silica sand deposit located beneath the mill complex.

The Sand-Sorting Building (1917, 1929) is a pyramid-shaped building with a steel frame resting on concrete foundation walls. At its base the building measures 130' x 72' with a height of approximately 120'. The windows are six-over-six-light, wood, double-hung, sash windows. The distinctive pyramidal roof contains numerous gable roof dormers. The roof is composed of lead and zinc sheets with welded joints covering tongue-and-groove wood sheathing. The Sand-Sorting Building contains a central conveyor and electrically-powered vibrating screens. A conveyor connecting the Sand-Sorting Building with the sand Draining-and-Drying Building is located at the third story level at the northeast corner of the sorting building. conveyor has a steel frame and corrugated asbestos cladding. Another external conveyor, extending up to the fourth floor level, is located along the south facade. The interior of Mill "C" contains its original machinery including the central wood conveyor, sand sieves and sorters, and electric motors and switches. The Sand-Sorting building is a prominent visual landmark in the Upper Illinois River Valley.

The Sand Draining-and-Drying Building of the Mill "C" complex was erected in 1927 by the engineering firm of Allen and Garcia (Chicago). The building contains a reinforced concrete foundation, a massive concrete slab supported by concrete mushroom columns, and large concrete bins. A steel frame, containing curtain walls of corrugated asbestos siding, rests on top of the concrete slab. The building measures approximately 175' x 60'. The concrete bins are three stories tall; the steel frame is two-and-one-half stories tall. Windows are steel-frame units of twelve and sixteen lights; some pivot. A gable roof and full length monitor are constructed of riveted steel trusses covered with corrugated metal. The riveted Warren roof trusses span 60' and were fabricated by Illinois Steel Company of Joliet. An overhead traveling crane, manufactured by Harnschefger Corporation of Milwaukee, extends the length of the building and is rated to 10,600 lbs. A steel-frame bridge running from the Draining-and-Drying Building to the Sand-Sorting Building contains a conveyor belt. The foundations and concrete bins of the original (1917) Sand-Washing-Draining-and-Drying building are located to the south of the 1927 building.

## SOURCES:

Ottawa, Old and New: A Complete History of Ottawa, Illinois, 1823-1914 (Ottawa, IL: The Republican Times, 1912-1914, reprinted by Bireline Publishing Co., Newell, Iowa, 1984), 114, 152.

The Silica Sands of Ottawa (Ottawa, IL: The Ottawa Silica Company, 1960).

Interview with Edmund P. Thornton, Chairman of the Ottawa Silica Foundation, August 1983.

Carl O. Sauer, <u>Geography of the Upper Illinois Valley and History of Development</u>, <u>State Geological Survey</u>, <u>Bulletin No. 27</u> (Urbana, IL: University of Illinois, 1916), 191.

Sanborn Map Co., Ottawa, LaSalle County, Illinois (New York: Sanborn Map Co., 1913, 1925).

"Silica Sand Plants at Ottawa, Ill.," <u>Rock Products</u>, v. 31 (February 18, 1928): 54-60.

Ottawa Daily Republican-Times, December 31, 1929.